

CLAIM LISTING

This claim listing replaces all the previous listings.

1. (currently amended) A method to provide a mitigation to of obtaining a transformed, cultivated crop capable of mitigating the effects of introgression of at least one advantageous genetically engineered trait to an uncultivated interbreeding species related to the transformed cultivated crop, the method comprising transforming a population of plants of the cultivated crop to co-express the at least one advantageous genetically engineered, trait, and at least one, mitigating genetic trait, wherein:
said at least one advantageous genetic trait is encoded by an advantageous gene conferring a trait selected from the group consisting of herbicide resistance, disease, insect and nematode resistance, environmental stress resistance, high productivity, modified agronomic quality, enhanced yield, modified ripening, bioremediation, expression of heterologous products and genetically modified plant products;
said at least one mitigating genetic trait is encoded by a mitigating gene, said mitigating gene being an anti-shattering gene, an anti-bolting gene or a dwarfism gene is selected from the group consisting of anti-seed shattering, abolished secondary dormancy, dwarfism, uniform or delayed ripening, seed stalk bolting, seed coat defects, uniform germination, root storage promotion, biennial growth, non-flowering and sterility;
whereas said advantageous gene genetically engineered trait and said mitigating gene mitigating genetic trait having a genetic distance of no greater than 10 centimorgans from each other so as to produce tandem introgression of said advantageous and said mitigating traits into said uncultivated interbreeding species; and
whereaswherein introgression and expression of said mitigating genetic trait in said uncultivated interbreeding species related to the cultivated crop renders said uncultivated interbreeding species less fit compared to a similar uncultivated

interbreeding species related to the cultivated crop and not expressing said mitigating genetic trait,;

~~thereby obtaining a transformed cultivated crop capable of mitigating the effects of introgression of the at least one advantageous genetically engineered trait of said cultivated crop to the uncultivated interbreeding species related thereto.~~

2. (Canceled)

3. (Canceled)

4. (Original) The method of claim 1, wherein said at least one mitigating genetic trait is an endogenous genetic trait of said cultivated crop.

5. (Previously presented) The method of claim 1, wherein said cultivated crop is tobacco, rice or oilseed rape, said advantageous genetic trait is herbicide resistance, and said mitigating genetic trait is gibberellic acid insensitivity.

6. (canceled)

7. (currently amended) The method of claim 1, wherein said cultivated crop is sugarbeets, said advantageous genetic trait is herbicide resistance, and said mitigating genetic trait is antibolting.

8. (canceled)

9. (withdrawn) A genetic construct for mitigating the effects of introgression of a genetically engineered commercially desirable genetic trait of a cultivated crop to an undesirable, interbreeding species related to the cultivated crop, the genetic construct comprising a first polynucleotide encoding at least one commercially desirable genetic trait and a second polynucleotide encoding at

least one mitigating genetic trait, wherein said at least one mitigating genetic trait is selected such that an undesirable, interbreeding species related to the cultivated crop expressing said at least one mitigating genetic trait is less fit than an undesirable, interbreeding species related to the cultivated crop not expressing said at least one mitigating genetic trait and wherein expression of said commercially desirable and said at least one mitigating genetic trait is genetically linked.

10. (Withdrawn) The genetic construct of claim 9, wherein said first and said polynucleotides are covalently linked.
11. (Withdrawn) The genetic construct of claim 9, wherein said first and said second polynucleotides are functionally linked.
12. (Withdrawn) The genetic construct of claim 11, wherein said first and said second polynucleotides are co-transformed.
13. (Withdrawn) The genetic construct of claim 12, wherein said first and second polynucleotides are integrated into the same chromosomal locus.
14. (Withdrawn) The genetic construct of claim 9, wherein the at least one commercially desirable genetic trait is selected from the group consisting of herbicide resistance, disease, insect and nematode resistance, environmental stress resistance, high productivity, modified agronomic quality, enhanced yield, modified ripening, bioremediation, expression of heterologous products and genetically modified plant products.
15. (Withdrawn) The genetic construct of claim 9, wherein said at least one mitigating genetic trait is selected from the group consisting of anti-seed shattering, abolished secondary dormancy, dwarfism, uniform or delayed

ripening, seed stalk bolting, seed coat defects, uniform germination, root storage promotion, biennial growth, non-flowering and sterility.

16. (Withdrawn) A genetically modified cultivated crop comprising the genetic construct of claim 9.
17. (Previously presented) The method of claim 1, wherein said advantageous genetic trait is herbicide resistance, and said mitigating genetic trait is anti-seed shattering.
18. (Currently amended) The method of claim 17, wherein said cultivated crop is selected from the group consisting of tobacco, rice ~~or~~ and oilseed rape.
19. (currently amended) A method to provide mitigation to ~~of obtaining a transformed, cultivated crop capable of mitigating the effects of introgression of at least one advantageous genetically engineered trait to an uncultivated interbreeding species related to the transformed cultivated crop, the method comprising transforming a population of plants of the cultivated crop to co-express the at least one advantageous genetically engineered trait, and at least one, mitigating genetic trait, wherein:~~

said at least one advantageous genetic trait is encoded by an advantageous gene conferring a trait of ~~is~~ herbicide resistance;

said at least one mitigating genetic trait is encoded by a mitigating gene, ~~said mitigating gene being an antishattering gene anti-seed shattering and/or dwarfism gene;~~

whereas said advantageous gene genetically engineered trait and said mitigating gene mitigating genetic trait being tightly genetically linked so as to produce tandem introgression of said advantageous and said mitigating traits into said uncultivated interbreeding species; and

whereas wherein introgression and expression of said mitigating genetic trait in said uncultivated interbreeding species related to the cultivated crop

renders said uncultivated interbreeding species less fit compared to a similar uncultivated interbreeding species related to the cultivated crop and not expressing said mitigating genetic trait,⁵

~~thereby obtaining a transformed cultivated crop capable of mitigating the effects of introgression of the at least one advantageous genetically engineered trait of said cultivated crop to the uncultivated interbreeding species related thereto.~~

20. (Currently amended) The method of claim 19, wherein said cultivated crop is selected from the group consisting of tobacco, rice or and oilseed rape.

21. (Currently amended) The method of claim 19, wherein said herbicide resistance is conferred by a ahas^R (acetohydroxy acid synthase) gene.

22. (Currently amended) The method of claim 19, wherein said dwarfism gene is a Δgai (gibberellic acid-insensitive) mutant gene and said anti-seed-shattering gene is a *shatterproof* gene.

23. (new) A method to provide a mitigation to effects of introgression of an advantageous genetically engineered trait to an uncultivated interbreeding species related to the transformed cultivated crop, the method comprising transforming a population of plants of the cultivated crop to co-express the advantageous genetically engineered trait, and a mitigating genetic trait, wherein:

 said advantageous genetic trait is encoded by an advantageous gene encoding a protein conferring herbicide resistance;

 said mitigating genetic trait is encoded by an anti-shattering gene;

 said advantageous gene and said anti-shattering gene having a genetic distance of no greater than 10 centimorgans from each other so as to produce tandem introgression of said advantageous and said mitigating traits into said uncultivated interbreeding species; and

wherein introgression and expression of said mitigating genetic trait in said uncultivated interbreeding species related to the cultivated crop renders said uncultivated interbreeding species less fit compared to a similar uncultivated interbreeding species related to the cultivated crop and not expressing said mitigating genetic trait.

24. (new) The method according to claim 1, wherein sequences of the advantageous gene and the mitigating gene are juxtaposed.